



Grey Wooded Forage Association

"Creating an Awareness of Forages"

Newsletter
Fall

2014

Published by
the Western Star

Box 1448, 5039 - 45 Street, Rocky Mountain House, Alberta
T4T 1B1, Phone: 403 844 2645, Fax: 403 844 2642,
Email: Muriel at GWFA1@telus.net or
Albert GWFA2@telus.net. or Ginette at GWFA3@telus.net
www.greywoodedforageassociation.com

'Like' Grey Wooded Forage Association
on Facebook and enjoy viewing our latest
photos and hear about
upcoming events!

facebook

Coming Events

- Cow-Calfenomics - Nov. 27, 2014 - Pg. 6
- Clearwater County's Cattlemen's Day - Pg 14
- GWFA Argentina Tour Deadline Extended - Pg 15
- Western Canadian Grazing Conference 2014 - Pg 16

Become a GWFA Member to receive our Monthly Issue of "The Blade" in the mail
and qualify for FREE consulting services! A Membership Form can be found on Pg 15!

In This Issue:

- Calculate the Cost of Preventing Your Livestock Water from Freezing - Pg 4
- Factors Which Influence Winterkill in Alfalfa - Pg 6
- Electrical Conductivity - The Pulse of the Soil - Pg 7
- First and Second Calf Heifers: Let's take a closer look at those teeth - Pg 9
- Don't Lose Out on Big Bucks by Cutting Your Mineral Program - Pg 11
- It's a Thought, by Harry Navelpicker - Pg 12
- Remote Wintering in Action in Red Deer County - Pg 13

VISION STATEMENT

GWFA - The centre of choice for gathering and dispersing of forage and livestock
information, providing a strong link with producers and the research community.

MISSION STATEMENT

To enhance awareness of the organization as an information exchange cen-
tre, illustrating forage and livestock production practices that are environmen-
tally and economically sustainable for the agricultural community.

Approved May 2012

It's the Prairies' best kept secret
for high performance livestock

GWFA
Silver
Sponsor



Your herd requires top-quality forages to keep pace with growing market needs. Proven® Seed stands behind our forage varieties with the same pride you take in your operation.

For more information, please call our Forage Help Desk at 1-800-661-3334, visit provenseed.ca or contact your Crop Production Services representative.

Proven®
SEED

The Power to Grow®

Proven® Seed is a registered trademark of Crop Production Services (Canada) Inc. CPS CROP PRODUCTION SERVICES and Design is a registered trademark of Crop Production Services, Inc.

10/14-40131

For All Your
Livestock Needs



- Bulk and Bagged Feed
- Animal Health
- Livestock Equipment
- Twine
- Fencing Supplies

GWFA
Silver
Sponsor



3D Fencing
Project Sponsor!



Rocky Mountain House Co-op Home Centre
4323 45th Street, Rocky Mountain House, AB.
Phone: 403-845-2844 Fax: 403-845-6570
Toll Free: 1-855-845-4166

2013-2014 GWFA Board of Directors

| | | | |
|--------------------|------------------------|----------------------|--------------------|
| Chair: | Victor Penner | Rocky Mountain House | 403-729-2973 |
| Vice Chair: | Kristen Ritson-Bennett | Innisfail | 403-358-1674 |
| Treasurer: | Cameron Jenkins | Spruceview | 403-728-3300 |
| Secretary: | Deb Skeels | Rocky Mountain House | 403-845-2515 |
| Directors: | Iain Aitken | Rimbey | 403-843-0094 |
| | Brendon Anderson | Rimbey | 403-843-3314 |
| | Vance Graham | Rocky Mountain House | 403-845-0649 |
| | Chris Sande | Rocky Mountain House | 403-729-3896 |
| ARECA Rep: | Herman Wyering | Ponoka | 403-783-2681 |
| ARD Ex-officio: | Ken Ziegler | Rocky Mountain House | 403-845-8204 |
| Manager: | Albert Kuipers | Office: 403-844-2645 | Cell: 403-357-7659 |
| Assistant Manager: | Ginette Boucher | Office: 403-844-2645 | Cell: 403-507-5478 |
| Office Manager: | Muriel Finkbeiner | GWFA Office: | 403-844-2645 |
| | | GWFA Office Fax: | 403-844-2642 |

3D Fencing
Project
Sponsors!



PowerFlex Fence Canada



Mountain View
COUNTY

Building Rural Better



Manager's Note

by Albert
Kuipers



Good news for anyone considering GWFA's Argentina Tour! The DEADLINE for getting your deposit in has been extended to November 21st, 2014!!!!!!

Go to greywoodedforageassociation.com for more information on the tour!

Thanks to the generosity of the Government of Alberta and the Honourable Verlyn Olson, Minister of Agriculture, our funding from the Agricultural Opportunities Fund (AOF) has been increased. This has allowed us to keep Ginette Boucher on as Assistant Manager till March 31st, 2015. Ginette has been working tirelessly at developing and beginning GWFA's Corporate Sponsorship Program, resulting in one Platinum Sponsor and three Silver Sponsors.

Our new Platinum Sponsor is **Lonestar Ranch & Sales** owned and operated by **Steve Cannon**. Lonestar is located directly north of Deermart John Deere Equipment Sales in Red Deer. You're invited to visit Steve at his store, or at the Agritrade Show November 5-8, 2014.

Our three new Silver Sponsors are **Crop Production Services (Proven Seeds)**, the **Rocky Mountain House Co-op Home Centre** and **HIGH BRIX Manufacturing**.

We would like to thank these new corporate sponsors for their generous contributions to GWFA and would like to

Grey Wooded Forage Association - Fall, 2014 - Page 3

welcome them to our organization. You will find advertisements with their contact information in this issue and you are invited to call, or visit with them and give them your appreciation along with ours.

This funding has also allowed us to extend our reach to all of the County of Wetaskiwin. Along with many county residents west of the QE2, we will be delivering our Spring and Fall Newsletters to the rest of Wetaskiwin County. We welcome County of Wetaskiwin residents to contact our office regarding GWFA membership and to learn what member services we have available. Thank you Kim Barkwell for welcoming us to the County of Wetaskiwin.

If you live and farm in Clearwater County, Mountain View County, Red Deer County, Lacombe County, or in the County of Ponoka and you aren't already a GWFA member, this invitation is to you as well. Membership and our member services are available to you no matter where you're located in these counties, not just those areas on grey wooded soils. Even if you're not from any of these counties, you are most welcome to become a GWFA member.

Our hope is that all of you find GWFA to be friendly and most helpful when you're looking for information and answers to your most challenging agricultural and, in particular, forage and grazing management related questions. Please feel free to contact me directly at **403-357-7659**, Ginette at **403-507-5478**, or Muriel at the GWFA office at **403-844-2645**.



Q: How efficiently can a cow utilize whole oats as compared to rolled, or milled oats?

A: Change in digestive efficiency is no more than 10% for rolled oats compared to whole oats. This is for animals that are 17 months of age or larger than 700 pounds. Animals under 700 pounds take more time to chew their grain and thus process it without man's intervention. (Watch a 6 year old child eat compared to a 16 year old). There is no difference in digestive efficiency for the animals under 700 pounds – processed or fed whole.

Mature cows, had only a 2% loss in digestibility as referenced in the feedlot management guide fact sheet on processing grain. [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/beef11490](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/beef11490)



Barry Yaremciw, M.Sc., P. Ag.

Beef & Forage Specialist, Ag-Info Centre

Agriculture & Rural Development, Stettler **310-FARM (3276)**



COUNTY OF WETASKIWIN NO. 10

Phone 780-352-3321

Toll Free 1-800-661-4125

www.county.wetaskiwin.ab.ca

County of Wetaskiwin Agricultural Services provides a variety of programs and services to promote and sustain agricultural production within County boundaries. Some of these include:

- Pest control: coyote, beaver, Richardson's ground squirrel
- Insect and disease ID
- Horticulture services
- Sustainable Ag - EFP tech, extension
- Roadside spraying/mowing
- Weed inspection

The County of Wetaskiwin is pleased to have the Grey Wooded Forage Association extend its reach to their residents and looks forward to working with GWFA!

Rimbey Implements Ltd.



Rimbey, AB

Al York General Manager

Cell: (403) 783-0593

Bus: (403) 843-3700

Fax: (403) 843-3430

Calculate the Cost of Preventing Your Livestock Water from Freezing >Dollar and Sense Decision Making<

The 1st of November in Alberta marks the beginning of sub-zero temperatures for the coming winter and the task of preventing frozen livestock drinking water sources. For new to the country life folk a stock tank, manually filled daily with a garden hose now becomes not just a chore but a problem.

You have now experienced the complete adage for the three conditions of a stock tank,-"Empty",- "Running over",- or "Froze". Frequently a floating stock tank heater is purchased to deal with the "Froze" condition. This will prove to be an expensive decision, not for the \$32.00 purchase price but for the electricity volume it consumes.

It is easy to calculate the cost of operating farm electrical equipment and appliances when you have the formula. The cost depends on the amount of electricity used, measured in watts and the length of time used measured in hours. Your farm Utility electrical meter measures your consumption in Kilowatt Hours and you are billed monthly.

Most common floating stock tank heaters are rated at 1,500 watts, this means it puts out a lot of heat when it operates for an hour and consumes 1.5 Kilowatt Hours of electrical power.

Cost of operation Formula > 1500 watts x 24 hours per day for one month (30 days) X electricity cost (10.5 cents) per KWH divided by 1000 = monthly cost of \$113.40

If you must get through a winter with the stock tank, insulate it the best you can and install a submersible 600 watt or simi-

lar tank heater with thermostat control. This will dramatically drop operating cost and do a better job of keeping your tank ice free.

The most common farm waterer is the automatic, when installed properly, requires very little attention. In severe cold weather the relatively low wattage, thermostatically controlled element in the automatic waterer may cut in and out for a total of 14 hours per day.

Operating cost for the 600 watt model > 600 watts X 14 hours per day x 30 days X 10.5 cents per KWH divided by 1000 = \$26.46 per month

Frequently the true cost of the KWH on your power bill is not recognized, note Transmission charge is a per KWH charge, changes every few months and current average is 2 cents per KWH. Line loss charge is a per KWH charge as well of approximately ½ cent .Therefore, if you have a good basic energy rate of 8 cents per KWH plus these add-ons, total is 10.5 cents per KWH. The 10.5 cents per KWH charge used here does not include other fixed monthly charges.

Neil Godlonton
Power Electrician; Retired



YOUR COMPLETE FORAGE LAWN & GARDEN SPECIALISTS



...whatever your needs or soil conditions, we have the right type of forage seed for you!

- hay, pasture, lawn, and native grass mixtures
- alfalfa | clovers | grasses
- custom blending at NO extra charge!

...complete natural gardening and wellness centre!

featuring:

- organic gardening solutions
- bird seed, bird seed mixtures, bird houses and feeders
- aromatherapy and personal care products

HANNAS

Seeds & Garden Centre

1-800-661-1529

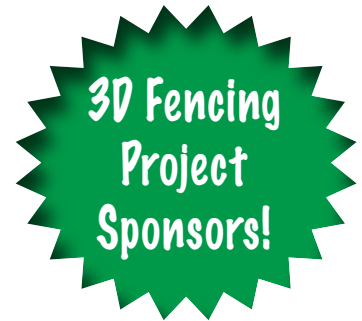
403-782-6671

5039 49th STREET, LACOMBE, AB | www.hannasseeds.com

EXPERIENCE

EFFICIENCY

EXCELLENCE



QUALITY LIVESTOCK EQUIPMENT AND SERVICE

"We know what it takes because we live it everyday"

MORAND LIVESTOCK EQUIPMENT DEALER

- complete livestock handling systems
- squeeze chute (with patented shoulder holder)
- maternity pens
- loading chutes (portable and stationary)
- gates and panels (all sizes and configurations)
-

GALLAGHER DEALER AND REPAIR CENTER

- full line of electric fencing supplies and equipment
- Western Canadian Repair Center, and system design consulting
- weigh scales, load bars, and RFID readers
-

MIRACO LIVESTOCK WATERER DEALER

- designed with clean out plug and completely rust free
- all sizes available for any size of operation
-

PROMOLD DEALER

- solar pasture water troughs, bunk feeders, fence line feeders, mineral feeders
- calf feeders, calf shelters, stand alone panels and windbreaks
- Verified Beef Program reimburses 70% (up to \$5,000.00) of the cost of a new squeeze, load bars, scale and RFID reader.



Phone: 403-391-9314

Toll Free: 1-855-391-9314

Fax: 403-347-1939

Email: lonestarranchsales@gmail.com



Factors Which Influence Winterkill in Alfalfa

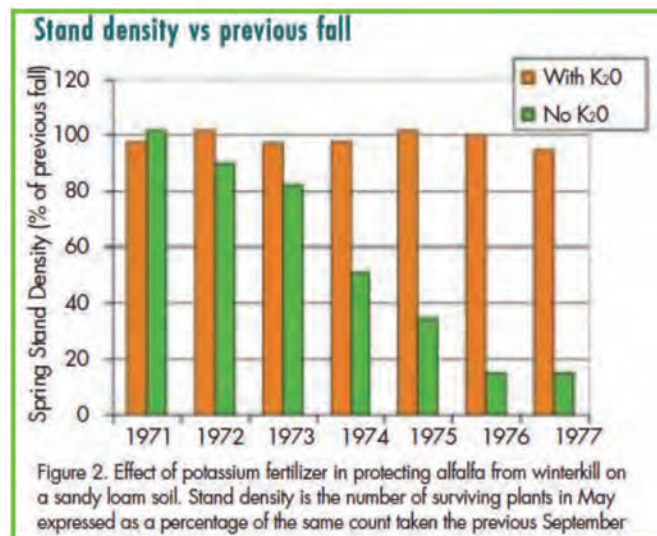
J.C. (Jack) Payne
P.Ag. Olds
College

The excellent fall weather we have had this year has helped farmers to complete a difficult harvest and to allow a lot of fall work to be done. In many areas soil moisture conditions are excellent as well. However there is a down side to the warm, moist fall. This type of weather can reduce the winter hardiness of some forage crops.

Saskatchewan Agriculture has an excellent publication which lists the major factors influencing with hardiness of alfalfa. Some of the factors include:

- ▶ Varietal selection. Varieties which have good winter hardiness will have a leg up when it comes to surviving a long cold winter.
- ▶ A warm moist fall is unfavourable for the hardening off of alfalfa. Rather than hardening off, plants may prolong vegetative growth and not put enough reserves into the roots in preparation for winter.
- ▶ Alternative freezing and thawing of the soil during the early fall and winter can reduce winter hardiness.
- ▶ Surface icing during the winter and early spring can reduce winter survival.
- ▶ Winter weather which persists longer than normal can negatively affect winter survival.
- ▶ Disease infections can reduce winter hardiness.
- ▶ Poor soil fertility. Balanced phosphorous, potassium and sulphur fertilization is important. Potassium fertilizer has also been shown to increase winter hardiness.

A well balanced fertilizer program can pay big dividends in yield, forage quality and winter hardiness. When alfalfa is grown on soils deficient in potassium, winterkill can be substantial. Soils which are sandy textured commonly have low levels of potassium. Research done decades ago demonstrates that adequate potassium fertilization enhances winter hardiness and early spring growth. The following figure is taken from an excellent publication from Manitoba Agriculture on fertilizing alfalfa.



Source: [http://www1.foragebeef.ca/\\$foragebeef/frgebeef.nsf/all/frg90/\\$FILE/fertilizingalfalfa.pdf](http://www1.foragebeef.ca/$foragebeef/frgebeef.nsf/all/frg90/$FILE/fertilizingalfalfa.pdf)

Another benefit to potassium fertilization is what this nutrient can do for forage quality. Adequate potassium levels in the soil will stimulate nitrogen fixation in alfalfa. Long term research has shown that potassium fertilization on sandy soils increases both yield and protein content of alfalfa. See the following table.

Table 2. Effect of potassium fertilizer on alfalfa yield, potassium content and protein content

| Rate of K ₂ O (lb/ac) | Yield (ton/ac) | Potassium % | Protein (%) |
|----------------------------------|----------------|-------------|-------------|
| 0 | 1.5 | 0.8 | 9.4 |
| 50 | 2.8 | 1.2 | 12.5 |
| 75 | 3.7 | 1.8 | 17.5 |
| 100 | 4.7 | 2.5 | 20.0 |
| 200 | 4.4 | 3.2 | 21.2 |

Data from five station-years on three Manitoba soils.
Initial soil potassium levels were 14 to 180 ppm.
Plots also received 60 lb/ac phosphorus and 30 lb/ac sulphur annually.

Source: [http://www1.foragebeef.ca/\\$foragebeef/frgebeef.nsf/all/frg90/\\$FILE/fertilizingalfalfa.pdf](http://www1.foragebeef.ca/$foragebeef/frgebeef.nsf/all/frg90/$FILE/fertilizingalfalfa.pdf)

Proper fertilizer management of forages not only improves yield and quality but winter hardiness. If you manage forages on sandy textured or peaty soils, a soil test will help you determine if extra potassium is needed. We haven't discussed the roles and benefits of sulphur or phosphorous for alfalfa. That could be the topic for another time.

Cow-Calfenomics

Seizing Opportunities in the Alberta Cow-Calf Sector

November 27, 2014 @ The Pomeroy Inn & Suites, Olds
8:30 AM to 3:00 PM

How to Register: All participants are requested to register prior to Wednesday, November 19, 2014. The registration fee is \$25.00 and includes lunch. Registration for students is free and compliments of Alberta Beef Producers.

To register please call the Ag-Info Center at 1-800-387-6030.

For more information go to agriculture.alberta.ca/cowcalfenomics

Logos: Alberta Beef Producers, AFSC, Agriculture Canada, Growing Forward, Alberta Government, Canada.

Electrical Conductivity

- The Pulse of the Soil

Glen Rabenberg and Christopher Kniffen



When we walk into our home on a dark night, the first thing we all do is turn on the lights. With the flip of a switch you complete the electrical circuit initiating the flow of electricity to a light bulb that illuminates your home. In the human body, your heart operates in a similar fashion. The flow of blood from your heart to all organs is controlled by electrical signaling. The heart's electrical system tells the heart when and how often to contract and relax. This electrical system or pulse can be altered by the intake of ions and activity level. For example, the intake of high salt foods can lead to a higher pulse rate, which is viewed by physicians as a "bad" form of energy. On the other hand, a balanced form of energy in-take affects your electrical system in a positive way. This energy is viewed by physicians as "good" energy. Waking up in the morning and only consuming caffeine does not give you the same energy as waking up and eating a balanced breakfast. Inputs into any biological system either human, animal, plant or soil will affect the energy level of that system.

In 1946, Albert Einstein theorized that all matter is energy. His theory which gave us the formula $E=MC^2$ laid the foundation for future generations to begin using energy theories in daily problem solving. If all matter is equal and simply a form of energy than the human electrical system can be analogous to the soil/plant system. Furthermore, the same concepts we apply to matter can be applied to our own physical health as well as the soil and plant health.

Consultants seeking to quantify the soils current energy level can be achieved in the field or in the lab by measuring the electrical conductivity of the soil. Electrical conductivity is a direct measurement of the energy flow in the soil. The level of energy in the soil can be a function of the soils ion concentration, clay type, moisture content, porosity, salinity, and temperature (Rhoades et al., 1989; McNeil, 1980; Johnson et al., 2001). Traditionally soil consultants have used electrical conductivity to measure salinity, however conductivity can also tell us much more about the physical structure and health of the soil. Based on these direct measurements, electrical conductivity can also indirectly measure crop productivity (McBride et al. 1990).

As consultants and growers we are focused on crop productivity. We often aim to maintain the ion concentration in the soil solution best suited for the highest crop production. This ion concentration is expressed by the quantity of ions in the diffuse layer of the soil colloid and also by the soils moisture content. Electrical conductivity can be used in the field to tell us the how much energy is available for plant growth. It is important to note, that natural fluctuations in electrical conductivity can occur. In the soil, the conductor of electrical current is water. As soil moisture changes due to dry periods and/or rainfall events, electrical conductivity can vary. Abiotic factors are variables in the accurate representation of the ion concentration in the soil solution. If the electrical conductivity (concentration of ions in the soil solution) is either too high or too low it will be reflected in decreased crop productivity (Eigenberg et. Al., 2002).

Crop productivity is governed by three disciplines of science: Physics, Chemistry and Biology. Explaining electrical conductivity on a chemical or biological level requires a much more lengthy and detailed explanation. By focusing on the physics of electrical conductivity, referring to it as "energy", simplicity can be brought to such a complex topic.

Einstein taught us that $E=MC^2$. This concept expresses that an object's mass is a function of energy. If you apply this concept to crop production, crops (mass) is simply an expression of energy. In order to produce mass (yield), energy is needed. For a plant to perform photosynthesis and produce mass; an initial energy requirement must be met. This energy requirement comes largely from the electrical current in the soil. Thus, soil electrical conductivity is a direct measurement of energy and an indirect measurement of crop productivity.

Crop Productivity can be simplified into two stages: growth and decomposition. We can discern that the growth stage of the plant life cycle has a different energy requirements than the decomposition stage. The energy needed to produce mass in the form of plant growth varies between 300 and 800 micro-siemens/ergs. When the energy in the soil falls below or above these values for a pro-longed period of time, the plant no longer can produce mass (growth) and decomposition will set in. With the on-set of decomposition in the plant tissue, disease and decay will follow. During the growth life cycle of the plant, energy must be present to produce mass (growth).



TAJFUN®

Firewood Processors

Western Canada Distributor:

Big Bear Services ~ David Patenaude

(403) 638-6763

email: bubbabert@telus.net

website: www.tajfun.com

In order to produce mass in the form of a nutrient dense healthy plant, the energy coming from the electrical conductivity of the soil must come from "good" sources. Electrical conductivity coming from biological activity, flocculation, soil moisture and clean balanced nutrients (ions) can be considered "good" sources of energy. Electrical conductivity coming from salinity in the soil solution can be defined as a "bad" source of energy. "Bad" sources of energy will produce nutrient poor, unhealthy, low energy, and quickly decomposable mass. Nutrient dense, healthy, high energy plant mass is what we as consultants and growers are all trying to achieve. Yes, by using "bad" sources of energy you can produce high quantities of mass (high yields). We see this year in and year out with the use of synthetic fertilizers. However, if your goal is to produce high quality, nutrient dense, healthy plant mass, your energy source must come from "good" sources. Low salt fertilizers, organic matter, biological amendments, cover cropping and proper soil stewardship can provide your soil with "good" sources of energy. All of which indirectly restores your soils fertility and sustainability for future generations.

If all matter is energy and all energy is matter, we as consultants and growers must begin to think in terms of energy. In order for seeds to germinate, an energy requirement must be met. In order for plants to grow, an energy requirement must be met. In order for plants to reproduce, an energy requirement must be met. In order for plants to dry out and be harvested, an energy requirement must be met. In order for your soil to repair itself over winter, an energy requirement must be met. And in order for you to have read this article, an energy requirement was met.

Submitted by **HighBrix Manufacturing**.

Acknowledgements: Thanks to Aaron Janda, Heather Huntley, Michelle Raabe, Alice Miller and Cindy Nikolaisen.

References:

- Eigenberg, R.A., J.W. Doran, J.A. Nienabar, R.B. Ferguson, and B.L. Woodbury. 2002. Electrical conductivity monitoring of soil condition and available N with animal manure and cover crop. Special issue on soil health as an indicator of sustainable management. Agric. Ecosyst. Environ.
- Johnson, C.K., J.W. Doran, H.R. Duke, B.J. Wienhold, K. Eskridge, and J.F. Shanahan. 2001. Field-scale electrical conductivity mapping for delineating soil condition. Faculty Publications, Department of Statistics. Paper 9. <http://digitalcommons.unl.edu/statisticsfacpub/9>.
- McBride, R.A., A.M. Gordon, and S.C.
- Shrive. 1990. Estimating forest soil quality from terrain measurements of apparent electrical conductivity. Soil Sci. Soc. Am. J. 54:290-293.
- McNeill, J.D. 1980 Electrical conductivity of soils and rocks. Tech. note TN-5. Geonics Ltd., Mississauga, ON, Canada.
- Rhoades, J.D., N.A. Manteghi, P.J. Shouse, and W.J. Alves. 1989. Soil electrical conductivity and soil salinity: new formulations and calibrations. Soil Sci. Soc. Am. J. 53:433-439.



First and second calf heifers: Let's take a closer look at those teeth!

Dr. Andrew Ritson-Bennett, DVM



One of my family's favorite movies growing up was *The Blues Brothers*. Of the many quotes from that movie, some of my favorite are: "Why not? If the s%#t fits, wear it", "We're putting the band back together", "We had a band powerful enough to turn goat piss into gasoline", "We're on a mission from God" and the line somewhat applicable to your second calf heifers, "You're gonna look pretty funny tryin' to eat corn on the cob with no teeth!"

In this article, when stating "bred heifer", I will be referring to a heifer anywhere from breeding to first calving (12 to 24 months). A "first calf heifer" will be used to describe an animal between her first and second calving.

Your first calf heifer, is still immature, no matter how well you managed her as a bred heifer. You followed the book and had her bred at 65% of mature body weight. So why the *Blues Brothers* quote? Well, "eating corn on the cob with no teeth" fits very nicely into her current situation. This past spring and summer, as a first calf heifer, she was out on pasture, nursing her first calf, trying to gain roughly 0.5 lb/day, and looking to get pregnant within 65-90 days for next year. Through this time she only had two permanent incisors while competing with the seasoned veterans of the range. So the next time you watch your son/daughter, niece/nephew or grandchild try to eat corn with no front teeth or maybe only two front teeth, reflect on the plight of your bred and first calf heifers.

When we get around to pregnancy checking, we often find that it is the first calf heifers that are the hardest to get rebred. It is not uncommon to see upwards of 30% or more open in a group of first calf heifers even when open heifers from the previous fall were culled. Because of this culling we would assume that the poor reproductive females, the late maturing, those that were not at the target of 65% mature weight when bred and the odd balls would be out of the herd for the successive breeding year. So this first calf heifer made it through her first gestation, produced a calf, was out with a proven bull, out on good pasture, and now dang-nabbit she is not pregnant come fall! Why??? Try "eating corn on the cob with no teeth" or in her case two permanent inci-

sor teeth and some baby teeth.

At around two years of age the first two permanent incisor teeth will be in full wear, and at around two and a half, the second set of incisors will replace the much smaller temporary incisor teeth. We are asking a lot from a lactating first calf heifer to hope that she will continue gaining weight, resume cycling and then rebreed within the target 65 days. All of these factors are nutrition dependant, which is relying on how well the animal can grab and tear grasses and legumes from pasture and saved forages.

As compared to a 10 month old heifers, mature cows have been found to be able to consume 27% more alfalfa and 50% more brome hay per unit of metabolic weight. It is reasonable to assume that the foraging and metabolic functioning of the lactating first calf heifer is subpar to that of a mature cow. Producers should be looking for animals with a wide mouth; and a set of adult teeth are a big part of the equation for the ability to grasp and tear forages.

We want bred and first calf heifers to be at a 3.5 out of 5 body condition score (BCS) at first calving and second calving. Numerous studies have shown that at body conditions below this, the females give birth to weaker calves and have subpar quality and quantity of colostrum which is vitally important to a newborn calf. In addition to this, cattle under the age of 36 months below a BCS of 3 at calving are statistically less likely to rebreed in time to then calve with the main herd the next spring if they rebreed at all. Thus if we hope to have them rebreed for a second calving season, it is imperative that we target a 3.5 BCS at first calving (85% of mature weight AT CALVING) and continue to provide them adequate nutrition from calving to rebreeding. One way to greatly help is to winter your bred and first calf heifers as a single group rather than expecting them to compete with the mature cow herd. Know however that over conditioning (BCS of 4+) can bring about many issues as well such as increased risk of dystocias through increased fat in the pelvis, increased fat within the ovaries leading to poorer cycling and increasing the fat content of the udder. Too much fat in the udder of a developing heifer will result in an overall lower lifetime milk production and thus lighter weaned calves throughout her productive life.

GEORGE'S FARM CENTRE LTD.
GFCL LOCAL 403.886.4222
www.georgesfarmcentre.com



MacDon flexi:coil 

Page 10 - Grey Wooded Forage Association - Fall, 2014

Assuming the above has all been looked after and the bred heifer calved at a BCS of 3.5, the nutrition provided to the now lactating first calf heifer is also critical to her success of rebreeding. With only two permanent teeth, she still needs a break. Most producers calve heifers separately from the main herd, and it is beneficial to continue feeding them separately until they are through rebreeding and possibly beyond. Smaller animals such as the bred and first calf heifer have a harder time competing for feeds and forages when mixed with larger mature cows whether it is on pasture or at the feed bunk. This will without a doubt lead to difficulties for them to rebreed and maintain pregnancy. At weaning, younger animals with a body condition score less than 3 can be fed as one group with your bred heifers and the rest can be put into the main herd with the mature cows. This gives the first calf heifer or under conditioned young cows a greater opportunity to increase body condition, sustain consistent growth and maintain her pregnancy.

Regardless of how you chose to do it, providing your lactating first calf heifers with good quality pasture or feed so that they can gain condition between calving and rebreeding will be rewarded in the fall with higher pregnancy rates. Test your feeds, know what you are feeding. Talk to a nutritionist or veterinarian for help with body condition scoring your animals. Utilize www.foragebeef.ca for more information on this topic and many others. With cattle prices where they are today, the return on investment for any additional feeding and fine tuning your management is huge if you can attain a higher pregnancy rate in your herd. Strongly consider taking a long hard look at how you plan on feeding your bred and first calf heifers this next winter,

spring and summer to optimize their pregnancy rates come next fall. Remember, "She's gonna look pretty funny tryin' to eat corn on the cob with no teeth!" (corn grazing is a discussion for another day)



Your farm information is the **key** to making better business choices and your farm more **profitable**

Sign up for an **AGRIPROFIT\$** Business Analysis today!

Call: 310-0000 then 780-422-3771

Email: dale.kalil@gov.ab.ca jesse.cole@gov.ab.ca

pauline.vanbiert@gov.ab.ca

Government of Alberta
Agriculture and Rural Development

AgriProfit\$

What's **NEW** on Foragebeef.ca?

See Front Page News
New information on forage beef
issues from across Canada

**New and Improved Swath Grazing
Manual Available Soon!**
Summarizing research done by
Western Forage/Beef Group and
Others

Coming Soon!
Greenhouse Gas Research Summary
as it affects the forage beef industry



www.foragebeef.ca

**BOOK IN FALL.
SAVE IN SPRING.**

RECEIVE
8%
OFF
2015

Reclaim™
HERBICIDE

Restore™
HERBICIDE

Grazon™
HERBICIDE

Book your 2015 Range & Pasture product online at www.earlysaves8.ca; or with an authorized Range & Pasture retailer between October 1st and November 30th, 2014 to receive 8% off Reclaim™, Restore™ II and Grazon™ in 2015.

*You must sign up annually to be eligible for the 8% discount.



Dow AgroSciences

Solutions for the Growing World

*™ Trademark of The Dow Chemical Company ("Dow")
or an affiliated company of Dow.
014-0215

Don't Lose Out on Big Bucks by Cutting Your Mineral Program

Logan Williams, M. Sc. Ruminant Nutritionist



Nutrition and reproduction are the most important factors affecting the financial sustainability of a cow-calf operation¹. Since it has been proven time and again that nutrition heavily impacts reproduction² it can be inferred that nutrition alone is the most important factor. Plus, of all the environmental factors shown to influence reproductive efficiency (photoperiod, temperature, climate, and nutrition), nutrition is the one you can most easily control³. As forage and grain alone will not provide adequate minerals for cattle, supplementation is required for optimal immunity, lactation, growth, and reproduction⁴. A deficiency in even one mineral can also negatively impact immune function^{2,5} costing you money in treatment costs, loss of animals, and decreased production. Genetic improvements have growth rates and production levels at all-time highs, making mineral supplementation more important with each generation. If a good vitamin and mineral program is not in place, it does not matter how good to genetics are nor how much energy and protein is provided, cattle will not perform to their full potential. When the budget is tight the first thing you may consider removing from your feeding plan is your vitamin and mineral program. The cost of the mineral might seem like an extra expense, one you don't feel you are receiving adequate return on. You may change your mind once you look at the numbers.

The negative consequences of mineral deficiency appear in stages. Immune function is impaired first, followed by reproductive efficiency, and only then will animals begin showing clinical symptoms⁵. By the time clinical symptoms such as hair discoloration with copper deficiency appear it has already cost the operation a lot of money. To put it into perspective, consider this. A phosphorous deficiency will reduce conception rate, lengthen interval of return to heat after calving, and reduce weaning weights. Studies show a 20% increase in fertility from supplementing phosphorous to a phosphorous-deficient herd is realistic. Even using a more conservative 10% increase in fertility you can see the impact. Consider a 100 cow herd grazing phosphorous-deficient pasture with no mineral supplementation.

Current live birth rate is 80%. Assuming a 10% increase with supplementation, this number will increase to 88%. Using an average weaning weight of 500lbs/calf, supplementation produced 4,000lbs more calf (8 more calves x 500lbs/calf = 4,000lbs). At current market prices of \$285/cwt this corresponds to an increased income of \$11,400. If cows consumed 0.1kg of mineral per head per day at a cost of \$1.10/kg, mineral cost for the year is \$4,015 for a net income of \$7,385 (\$11,400-\$4,015 = \$7,385). This calculation does not even take into account the increased weaning weight that would occur. Clearly feeding mineral can more than pay for itself, especially during these days of high cattle prices.

Making the initial investment in mineral will pay off in reduced treatment costs, higher growth rates, and better calving rates, since a deficiency in even one mineral will negatively affect health, growth, and reproduction. The main goal for cattle producers is to grow and breed cattle efficiently. By supplying the correct mineral to your cattle, year-round, they will be able to do this to the best of their ability.

References:

- Hess, B.W., Lake, S.L., Scholljegerdes, E.J., Weston, T.R., Nayigihugu, V., Molle, J.D.C., and Moss, G.E. 2005. Nutritional controls of beef cow reproduction. J. Anim. Sci. 83:E90-106.
- National Research Council: Nutrient Requirements of Beef Cattle. 1996. 7th Revised Ed. National Academy Press. Washington, DC, USA.
- Dunn, T.G., and Moss, G.E. 1992. Effects of nutrient deficiencies and excesses on reproductive efficiency of livestock. J. Anim. Sci. 70:1580-1593.
- Greene, L.W. 2000. Designing mineral supplementation of forage programs for beef cattle. J. Anim. Sci. 77:1-9.
- Corah, L. 1996. Trace mineral requirements of grazing cattle. Anim. Feed Sci. Tech. 59:61-70.

3D Fencing
Project
Sponsor!

JJB Ranch

Jim & Barb Bauer

Ph. 403.546.2427 email: jim.bauer50@gmail.com

Offering Electric Fencing Solutions

Now handling Tru-Test scales and RFID Wand readers!



TRU-TEST



Ritchie
Fresh Water
For Life™



www.montgomeryauctions.com

Full line of Ritchie waterers and parts available at
MONTGOMERY AUCTION SERVICES LTD.

BLACKFALDS, AB

403-885-5149 800-371-6963

It's a Thought

by Harry
Navelpicker



Well folks, I'm happy to say that 2014 is going to be one of the better years going into my history books. I'm reasonably happy, I'm healthy and I still have the odd friend. The rains came at the right time, the sun shone as it has in the past and the issues around global warming haven't affected me too badly. Our crops grew as I'd hoped with excellent re-growth which has really helped the calf crop to grow fat and sassy.

2014 is also the year that I've been waiting for regarding calf prices. I remember being excited with the prices of 2013 where I sold every extra calf possible excepting my replacement heifers considering that prices had never been so good and that I should cash in while the irons were hot. Instead the prices just kept climbing and the folks that kept their calves or bought calves for winter back-grounding actually did pretty good. Who knew!

So this spring when I could lock in a price equivalent to \$1245 for a 550 pound weaned steer calf, I seriously considered it. For a mere \$18 per calf I could be assured of that value come fall. That seemed pretty sweet to me and so off to the AFSC office I marched on May 29 which was one day before the deadline.

Well wouldn't you know it if I didn't meet up with my friend Jimmy Weekster there. He was sitting across from the AFSC lady making small talk while she was filling out his forms. Obviously he knew why I was coming in so we chatted about the opportunity to lock in the market for the coming fall. Our conclusion was that there are so many things we have control over on the farm but that there are some things that we most certainly do not, one being the big market picture. We both noted that for quite a number of years we were hoping for "the banner year" just to see something unexpected occur that squashed the prices we'd expected. So we'd sold for the best we could and resolved that next year would be better.

By design, this Western Canadian Price Insurance Program would be the answer to cover those unexpected and uncontrolled sways in the market place. And so we signed on the line and wrote a cheque.

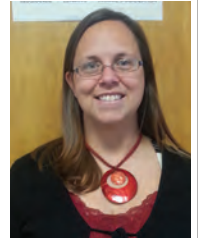
I also remember bragging what I'd done a couple of weeks later to my other friend Sherman Stringer. He told me that I'd wasted my money buying that assurance and that prices would be going up this summer and fall. Although the larger part of me hoped that Sherman would be right I wasn't as convinced as he seemed to be. Obviously he didn't buy into the program.

Well Sherman was right. The cattle prices have sailed higher

all along and I might actually experience the banner prices that I'd hoped for all these years. Very likely the prices will be well above the strike price of the program and I won't cash in. Although Sherman was right, having the assurance of a pretty good income from the end of May and on was valuable. The question will be on my table next year again. I realize that every year is different and I'll have to revisit this possibility with the best information I'll have when the time comes.

Drop in at the Rocky Mountain House Branch for more information about AFSC programs and services. Our local and knowledgeable staff members include:

Heather Karst, Account Manager
Chantel Taylor, Clint Services Representative
(Old) Provincial Building
@4934-50 Street
Rocky Mountain House AB



Thank You Sponsors!

Aspen Ranch Outdoor Education Center would like to thank our sponsors and volunteers for another successful program year and for their support with generous donations of time and money.

Aspen Ranch Outdoor Education Centre provides elementary school students in Central Alberta with hands-on education in sustainable agriculture and farm safety. Program dates for 2014 were held in the last week of September.

- Clearwater County
- Sundre Multi 4-H Club
- Eagle Hill 4-H Beef Club
- Red Deer County
- Mountains Edge Cycle & Sled
- Sobey's Olds
- Sundre IGA
- Peggy Good
- Blue Dairy Farm
- Shell Canada
- Alberta Health Services
- Olds College
- Classroom Agriculture Program
- Alberta Agriculture & Rural Development
- Westview Co-op
- UFA
- Agro
- John Deere - Olds



FROSTFREE NOSEPUMPS LTD.



**SIMPLE &
RELIABLE
YEAR-ROUND
LIVESTOCK
WATERING**

- Saves money
- Saves time
- Saves the environment

NO POWER REQUIRED!

866-843-6744

www.FrostfreeNosepumps.com

Remote Wintering in Action in Red Deer County



**"Getting ready for remote wintering at Conn Ranch:
bedding, feed, portable shelters, year-round waterer."**

Greg Conn farms in a very unique area in Red Deer County, near where the Medicine River and Little Red Deer River join the Red Deer River. This confluence of the County's three biggest rivers is an environmentally significant area. Greg Conn is a very active environmental steward, putting into place practices that enhance his business efforts while protecting the natural areas he is connected to and enjoys.

Greg's latest stewardship project is the creation of a new winter watering site, which will move his 400+ head of cattle from pens near the yard out onto his fields and pastures through the

winter. This is "Remote Wintering" in action. This practice helps minimize manure build up by getting the cattle themselves to spread nutrients and organic matter onto the fields where it is useful. This is a great example of conscious nutrient management and winter feeding and bedding, that limits manure concentration that could potentially run off into the river.

To make his remote wintering happen, Greg has drilled a new well and installed three year-round waterers. This new watering site not only moves cattle away from pens near the yard, it also keeps them away from direct-access river watering, and provides a watering option during summer grazing as well.

This new Remote Wintering project enhances another project Greg did in 2012. That year, he drilled a shallow well and installed a high-flow pump that can move water out of the river valley up into pastures north of his yard, without the need for a pressure system. When combined with his newly installed watering site west of his yard, Greg is able to provide many watering options and winter feeding and bedding sites to his cattle, which will put

manure to good use on the land, and ultimately protect the neighbouring rivers.

Greg has always been a supporter of Alberta's Environmental Farm Plan. With help from the Conservation Coordinator with Red Deer County, he prepared the Environmental Farm Plan for his farm. Together, they looked at all aspects of the farm, assessed environmental risks, and established future plans.

In 2010, with support from Red Deer County's conservation programming, Greg installed permanent fencing to protect a very productive wetland on another parcel of his land. In what is a great story of multi-generational stewardship, Greg's son Devon now manages this land and the wetland fencing project, and has ideas for his own future conservation projects.

To help cover the costs of these projects, the Conn's have participated in Growing Forward programs and in the County's Conservation Partners and Off the Creek programs.

Environmental stewardship projects do come with a price-tag, but local municipalities recognize that there is a clear benefit to landowners and the region to protect natural areas. Local municipalities have created various funding opportunities for water quality conservation, tree-planting, and habitat protection that supports landowners with their desire to protect nature's resources and enhance their business efforts. You can ensure continued delivery of on-the-ground stewardship efforts and best practices by encouraging your local politicians to actively support municipally led conservation programming.

To learn about conservation programming opportunities for your land or business, contact Ken Lewis, Conservation Coordinator for Red Deer County at 403.505.9038 or klewis@rdcounty.ca www.rdcounty.ca



We've got you covered

**Quality products
direct to your farm, feedlot or dairy.**






- Up North Silage Covers
- Up North Silage Bags
- Up North Silage Shield
- Up North Grain Bags
- GEM Bale Wrap
- GEM Silage Baggers
- GEM Bacteria Blend
- Gandy Inoculant
- Applicators
- Net Wrap
- Twine
- Bale End Caps
- Silage Tape
- Zipper Tools
- Poly Fastener
- Secure Covers™







403-342-7522 • 888-552-5505 • gemsilage@telus.net
 Bay 49, 108-105 Dumfries Trail • (Dumfries Business Centre) • Red Deer, Alberta T4S 0K6



Red Deer County

Red Deer County's Conservation Programs support landowners in adopting practices that are good for the land, for the water, and for their bottom line.

www.rdcountry.ca

Ken Lewis
Conservation Coordinator
403.505.9038
klewis@rdcounty.ca

Aimee Delaney
Conservation Assistant
403.597.4364
adelaney@rdcounty.ca

This publication is made possible by funding from our major sponsors, the Agriculture Opportunities Fund (AOF)



GWFA has been partnering with FarmOn Foundation for the development of several short videos. Working with Dr. Vern Baron and Dr. John Basarab of the Lacombe Research Centre and Dr. Tom Flesch of the U of A, FarmOn produced "Measuring Methane Emissions from Cattle" and "Cattle and Methane Emissions - Are we the problem, or the solution?"

FarmOn has also produced a series of videos in workshops on building electric fences with Albert Kuipers. Alber also helped FarmOn Videographer, Ben Wilson and FarmOn's Chair, Sarah Wray to produce a video workshop on the four basic principles of grazing management.

To view these videos, go to www.farmon.com, or the GWFA website, or the GWFA Facebook page.



CLEARWATER COUNTY
Agricultural Services and Landcare

11TH ANNUAL Cattlemen's DAY
Thursday November 20th, 2014



"How Production Practices Affect Carcass Quality"

This Free Event Includes:

- > Roast Beef and Yorkshire Pudding Lunch
- > A live demonstration of Hi Hog's latest cattle handling system
- > Pat Fisher, Cattleland Feedyards: what feedlots look for in calves
- > Tom Lynch-Stanton; The Rancher's Dilemma
- > Dr. Clark Bertagnolli; Clearwater Veterinary; Ivomec Resistance
- > Dr. Gordon Krebs; BSE Surveillance Program Update
- > Rick Dehod, AARD; Managing Profits in Good times

Pre-registration is required by November 14th,
so give us a call @ 403-845-4444
to assure your attendance at this always popular event.

HANG ON TO THAT TAIL!



ONE STOP CATTLE FINANCING
BC, ALBERTA, SASK

Farmers Helping Farmers

FOOTHILLS
LIVESTOCK CO-OP


18 Years Old & Still Going Strong!
Bred Cow Program! • Feeder Program!

1-403-845-6669

Toll Free
1-866-848-6669

No Restrictions
Purchase and Marketing
Your choice

www.foothillslivestock.ca



Rocky Mountain House, Alberta

Grey Wooded Forage Association Argentina Tour



Leader Tours Inc.

Main Tour: Feb 20th to March 3rd, 2015.

Optional Iguazú Falls: March 3rd to March 6th.

Deadline Extended!

\$500 deposit required per person to secure your seat!

Deposit must be received on or before

November 21, 2014!

To book or inquire about this tour
please call or email:

Lawrence Rowley Phone: 403-270-7044

Email: lawrence@leadertours.ca

For more information go to:

www.greywoodedforageassociation.com



Become a GWFA Member, or Renew Your Membership!

Please mail the portion below with a cheque for \$20.00 to:

Grey Wooded Forage Association

Box 1448, Rocky Mountain House, Alberta T4T-1B1

PLEASE PRINT CLEARLY:

Renewal _____ or New Member _____

Canada Post _____ or Email _____

Name _____ Phone _____

Company Name _____ Mobile Phone _____

Address _____ Fax _____

Town _____ Prov _____ Email _____

Postal Code _____ Confirm Email _____

Please give us an idea of what area of forage production you are interested in:

Controlled Grazing & Pasture Management: _____

Growing Annual Forages for Extended Grazing or Swath Grazing: _____

Growing Annual Forages for Silage or Greenfeed: _____

Growing Hay: _____ Ration Balancing: _____

Soil Biology: _____ Pasture Rejuvenation or Renovation: _____

Low Cost Cow/calf Production: _____

Environmental Sustainability: _____ Economical Sustainability: _____

Comments: _____



Western Canadian Grazing Conference



"Going Beyond Sustainability"

December 9, 10 & 11, 2014

**Radisson Hotel
Edmonton South**



Keynote Speakers:

Judith Schwartz - Cows Save the Planet

Dr. Diane Knight - How Legumes Feed the Soil

Josh Dukart - Thinking Regeneratively...Beyond Our Own Borders

Producer Panel - Transitioning to Pasture

Banquet: Greg Johnson - I'm Just a Tornado Hunter

**For more information contact:
www.wcgconference.ca • ARECA • 780.416.6046**

